OVERALL AGENCY IT PLAN GUIDELINES:

I. Top Five IT Goals – Identify your agency's top five goals/objectives for utilizing information technology in FY17, and how they serve your agency's business needs. This response can be a high-level, one-page summary.

Improve Disaster Recovery and High Availability Capabilities

The DFI currently pays for a single rack at the Femrite data center; DFI staff maintain both the rack's hosts along with the hosted servers. The agency's production web application server stack is hosted on these servers. The DFI also hosts its non-production web application stack at our West Washington facility and nightly backups are stored at each location. The current disaster recovery plan is to promote the non-production stack at West Washington to production as a backup site.

The DFI has begun working with the DOA/DET to migrate all servers to the Femrite Data Center and, where appropriate, use the Milwaukee Data Center as a disaster recovery site. Along with partnering with DOA/DET, the DFI has plans to leverage cloud-based providers, using the DOA/DET as a broker, to enable the agency to move away from managing and maintaining server hardware altogether.

Along with building up our server disaster recovery stance, the DFI is also starting to implement Virtual Desktop Infrastructure (VDI) and providing more business users with laptops and remote work capabilities. Among the goals of this effort is the ability to enable workforce continuity in case of a disaster.

Continued Product Integration with the One Stop Business Portal

The DFI participated in Phase I of the One Stop Business Portal project by service orienting three existing business entity formation products. The agency will also be working with WIN/NIC on Phase II of this state-wide effort, which will incorporate corresponding annual report filings for the three business entity products that were service enabled as part of the Phase I effort.

Along with looking to further strengthen our partnership with WIN/NIC via One Stop Business Portal product integration, the DFI may also engage WIN/NIC for a website revitalization effort. A website revitalization effort would not only provide an opportunity to possibly work with WIN/NIC once again, but also reduce the technical debt footprint at the agency, as the existing WDFI.org content is realized via an older web programing toolset. The goal of this effort is to implement and leverage a web content management system which would reduce the IT Bureau's operational efforts and costs.

Data Warehouse / Business Intelligence Platform Initialization

Currently, the DFI has a single operational database instance which does not have the capability to support extensive data analysis operations without suffering performance issues which affect production processes and applications. Additionally, this operational instance is used as the agency's reporting platform, which also has an effect on day-to-day processing activities, uses inconsistent reporting methods, and leverages older reporting technologies.

The DFI has plans to build up a data warehouse platform, which will reduce these performance stresses within our current operational data store, along with

provide a platform for business intelligence solutions. The IT bureau will also build the platform and infrastructure to support reporting and business analysis for its in-house business partners. This project start date is dependent on our ability to hire a data warehouse / business intelligence architect to assist with design effort; DOA/DET may be able to provide these resources for the agency. This effort will include building new database infrastructure and migrating data for analysis, along with building data-marts to support consistent reporting of business intelligence data.

Financial Consolidation

The Financial Consolidation project will provide the DFI with a unified accounting, financial and fiscal processing system, complete with the necessary administrative applications and reporting. Initially, a gap analysis will be performed to compare the current and future states, from there missing needs will be identified, which will be addressed as part of the design effort. A single function-based data store and system will be designed and implemented to centralize processing and eliminate redundancy. Any applications requiring modification to leverage this new functionality will be identified and the resulting needed actions prioritized.

This project effort and the resulting documentation will enhance the understanding of the DFI accounting, financial, and fiscal operations from both a business and technology perspective permitting a more agile approach to projects in the future.

Technical Debt and Operational Cost Reduction

The overwhelming majority of application software at the DFI has been developed in-house, which has created a large application maintenance footprint for the agency to manage. For the most part, the in-house developed application code has stood up well over time, although some of the technologies used are aging, such as VB6 and Classic ASP. These older technologies require the DFI IT Bureau to maintain expertise in older technologies which prevents the agency from realizing efficiencies available with newer technology platforms, tools, and talent.

Some of the goals for fiscal year 2017 include reducing the number of Classic ASP applications from 28 to 10, reducing the number of VB6 client applications from 2 to 1 and entirely re-writing the single existing CQCS-based application. Effort will also be applied toward reducing server footprint by retiring older and non-standard technology servers.

Other areas where the DFI will look to lower IT operational costs include implementation of a content management system as part of a multi-site revitalization effort. The DFI will also continue efforts to add to our nascent application portfolio management techniques, looking to build up more knowledge and applicable data to help manage technical debt and operational costs moving forward.

II. Agency Projects – List all of your agency's IT projects expected to cost \$1 million or more.

None of the agency's current projects are expected to cost \$1 million or more

III. <u>Potential</u> Agency Projects – List all <u>potential</u> FY17 agency IT projects that could meet the \$1 million-or-more cost threshold.

If legislation passes that requires a new agricultural lien system, the cost could reach \$1 million or more, depending on what the legislation requires. DFI plans to work with the State of Minnesota to leverage the work they have already done and we hope this will result in a lower cost than would otherwise be possible.

Potential Project Name: Agricultural Liens

Description: Create and operate a new system to provide a central lien filing system for agricultural products

Anticipated Total Cost: Unknown until scope of the system is further defined

Resourcing: Unknown until legislation is passed

IV. IT Infrastructure Projects or Expenditures – Describe any projects or anticipated expenditures over \$100,000 related to augmenting IT infrastructure.

DFI does not anticipate the need for any infrastructure projects that would exceed the \$100,000 threshold.

V. Please describe your agency's plans to migrate to Office 365. A high-level paragraph or two is sufficient, but please include an expected approximate timeline for your migration.

The DFI recently completed a migration to Office 2013 to support the DET Exchange 2013 migration. The agency has no plans to migrate to Office 365 until such time DET offers an Office 365 solution for DFI to migrate to.

VI. Please describe your agency's plans to participate in the Voice over Internet Protocol (VoIP) rollout. A high-level paragraph or two is sufficient, but please include an expected approximate timeline for your rollout.

The DFI plans to leverage VoIP as part of the building move to Hill Farms in the spring of 2018.

- VII. Response removed for Web publishing purposes.
- VIII. The DFI is in the process of engaging the DOA/DET to scan our production web application servers for vulnerabilities and performing remediation efforts on the results. This will be an iterative process throughout fiscal year 2017, with various security scans run against environments, remediation efforts and scan re-runs to verify remediation efforts.
- IX. Please attach with this plan your agency's portfolio assessment. If the assessment is not yet completed, please indicate the status of progress toward completion of the agency portfolio assessment.

Attached.

X. Additional Issues/Activities (OPTIONAL) – Identify and explain issues or other activities not described already that are influencing, or could influence, successful execution of your agency's IT plan and about which DOA/DET should be aware.

N/A